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780.29643CX4

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Thomas J. CAMPANA, Jr. et al

Serial No.:

To Be Assigned

(Concurrently Herewith)

Filed:

December 6, 1999

(Concurrently Herewith)

For:

ELECTRONIC MAIL SYSTEM WITH RF

COMMUNICATIONS TO MOBILE PROCESSORS

Group:

2744 (Previous)

Examiner:

William Trost (Previous)

### SUBMISSION OF FORMAL DRAWINGS

Assistant Commissioner for Patents Washington, D. C. 20231 December 6, 1999

sir:

Submitted herewith are twelve (12) sheets of Formal Drawings (non-bristol boards) showing Figs. 1-12 in the above-identified application in compliance with the provisions of Rule 84.

Respectfully submitted,

ANTONELLI / TERRY, STOUT & KRAUS, LLP

Donald E. Stout

Registration No. 26,422

(703) 312-6600

DES:dlh

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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors:

THOMAS J. CAMPANA, JR., MICHAEL P. PONSCHKE,

and GARY F. THELEN

Invention:

ELECTRONIC MAIL SYSTEM WITH RF

COMMUNICATIONS TO MOBILE PROCESSORS

Antonelli, Terry, Stout & Kraus Suite 600 1919 Pennsylvania Avenue, N. W. Washington, D. C. 20006

#### **SPECIFICATION**

To all whom it may concern:

Be it known that We, Thomas J. Campana, Jr., Michael P. Ponschke, and Gary F. Thelen, citizens of the United States, residing respectively at 3836 West 86th Street, Chicago, Illinois 60652; 212 Tara Drive, Lockport, Illinois 60441; and 16 Fox Lane, Palos Park, Illinois 60464; have invented certain new and useful improvements in

ELECTRONIC MAIL SYSTEM WITH RF COMMUNICATIONS TO MOBILE PROCESSORS

of which the following is a specification.

一事。

F/G. 20 (PRIOR ART) DEVICE HUB SWITCH #P TO OTHER HUBS PERIPHERAL PAGING PAGING | 197 <u>-</u>6≘ HUB SWITCH #2 4128 TO CLOSEST HUBS 950XXXX \26 112/23 ,124 28 LOCAL PAGING SERVICE LATA SWITCH #N 2 8 7154 TO OTHER HUBS SSOXXXX 121 126 TO CLOSEST LATA SWITCHES TO Y HUB SWITCH # 12/ TRUNK <u>é</u> LOCAL PAGING 115 SERVICE LATA SWITCH #1 € 127 TO CLOSEST HUBS 8 782 ₹ 721 124 } ≌

FIG. 3 (PRIOR ART)

**SWITCH MEMORY** MAP LOCAL 160 158 156 154 LOCAL FREQUENCY SUBSCRIBER S N (9999) LATA **BUFFERS BUFFERS** FILES FILES N (1,000) 184 INBOUND 162 FILE 1 (1,000) ① FILE # I ( 0,000) **PAGES** 164 INBOUND 0-15 FRE-② TELEPHONE # 166 0 LATA (3) SUBSCRIBER AND PAGER ID CODE QUENCIES USED 168 BUFFER IN REGION COR-(4) SERVICE OPTIONS ١ RESPONDING TO (a) NO SERVICE (b) LOCAL FILE # 2 180 © REGIONAL (d) NATIONAL 3 (e) ABOVE WITH REPEAT PAGING 4 ① DATA SERVICE 186 170 OUTBOUND ⑤ SUBSCRIBER NAME/ACCOUNT 172 5 LATA ⑥ ACCOUNT # 174 BUFFER 1 PAGE COUNT (L,R,N) 176 6 (8) # OF DATA CHARACTERS SENT - 178 (9) DESTINATIONS AREA CODE(S) 7 182 8 FILE # N (999) 9 FILE # N (9,999) ID CODE **BUFFERS** 

F/G. 4

(PRIOR ART)

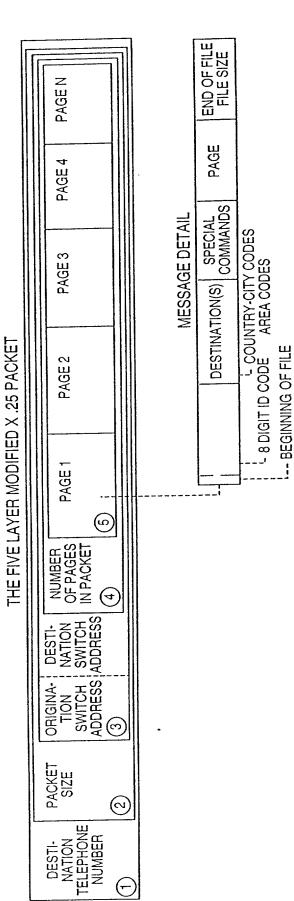
		LATA SWITCH M	EMORY MAP		100
		190	192	194	196
			/		
188	HUB BUFFERS	LOCAL BUFFERS	L ATA 1D MEMORY	OPTIONAL	OPTIONAL
. 198 ~	OUTBOUND PAGES	INBOUND PAGES 202	ALL PAGER ID CODES OF LOCAL#I		
		OUTBOUND PAGES LOCAL # I		BUFFER PAGES FROM	ALL CALL! BUFFER   PAGES   FROM
				HUB Switch	SWITCHES
200 —	INBOUND Pages	204			
	•	OUTBOUND LOCAL # N (25)	ALL PAGER ID CODES OF LOCAL ≠ N (26)		

F/G. 5 (PRIOR ART)

HUB SWITCH MEMORY MAP

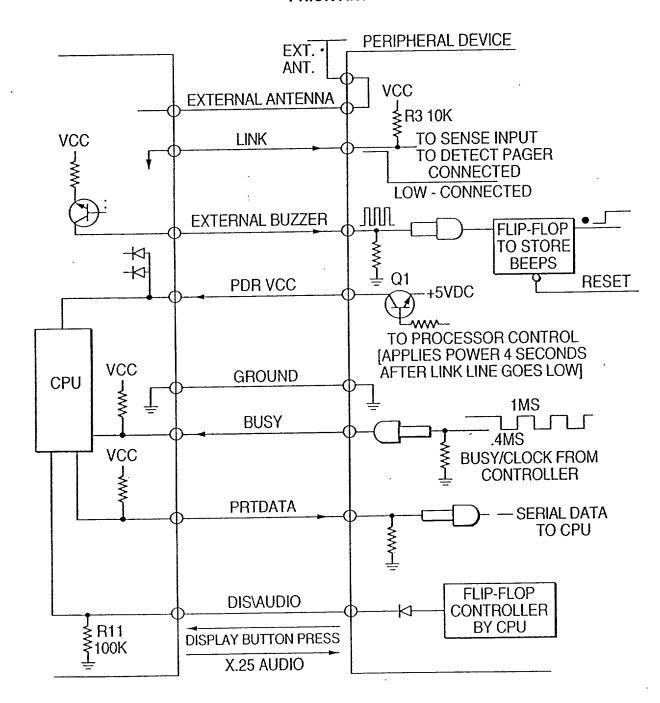
	206	208	210	212	
	HUB BUFFERS	LATA BUFFERS	LATA CODE TABLES N (100)	HUB ROUTING CODES N (1000)	
	INBOUND HUB# I	INBOUND LATA#1	LATA	ROUTING CODE 1,2,3,4,5,6 (312)	<u>'</u> 4
		218	CODE 222 # 1		
214		<u>-</u>	,		
	INBOUND	INBOUND			{
	HUB # N (6) LATA # N (100)				
	OUTBOUND HUB I	OUTBOUND LATA I	<del></del>		
1					
	**************************************				
ļ			<del></del>		
		220 —		<del></del>	
		<del></del>			
216	<del></del>		<del></del>		
1					
			LATA CODE		
	OUTBOUND HUB # N (6)	OUTBOUND LATA # N (100)	# N (100)	ROUTING CODE # N (999)	

**F/G. 6** PRIOR ART



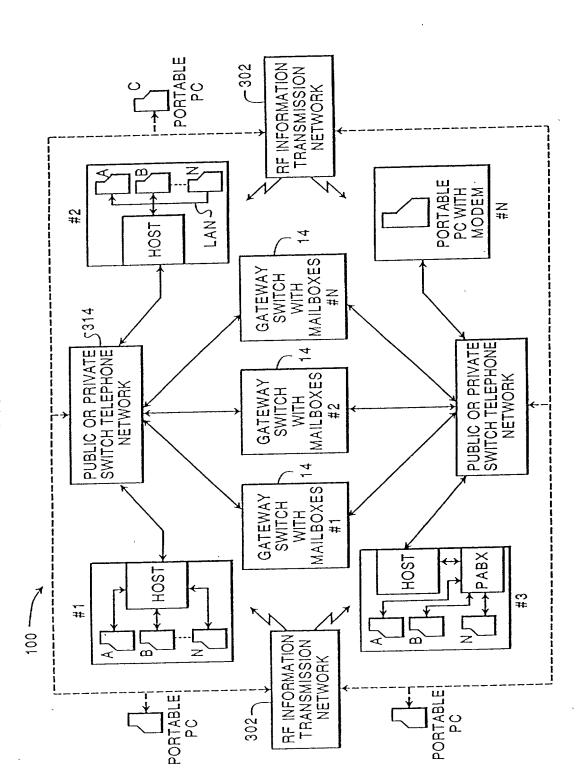
APPROVED	O.G. FIG.		
ву	CLASS	SUBCLASS	
DRAFTSMAN			

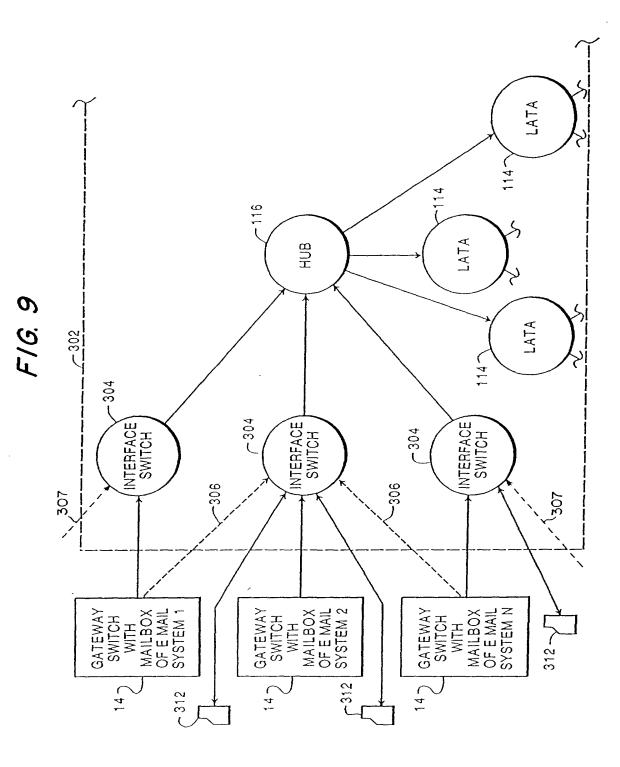
FIG. 7
PRIOR ART



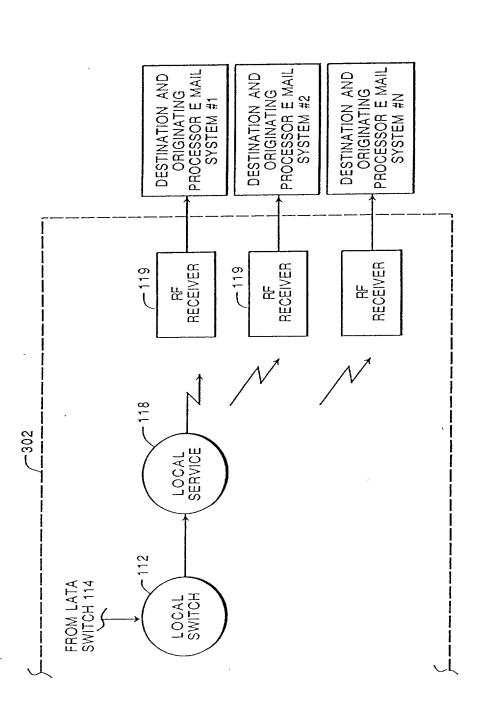
APPROVED	O.G. FIG.		
ВУ	CLASS	SUBCLASS	
DRAFTSMAN	•		

F/G. 8





F1G. 10



NO ACTION OTHER THAN ID VERIFICATION THAN ID VERIFICATION THAN ID VERIFICATION THAN ID VERIFICATION NO ACTION OTHER NO ACTION OTHER NO ACTION OTHER ADDS ID OF RECEIVER 119 ADDS ID OF RF RECEIVER 119 ADDS ID OF RECEIVER 119 INTERFACE SWITCH 304 DESTINATION AND ID OF RECEIVER 119 ADDS ID OF RECEIVER 119 ADDS WIRELESS ADDS WIRELESS DESTINATION NO-ACTION NO-ACTION GATEWAY SWITCH 14 NO-ACTION NO-ACTION ADDS DESTINATION PROCESSOR, OPERATOR POINTS TO DISPLAYED ICON, ORIGINATING PROCESSOR ADDS WIRELESS DESTINATION AND ID OF RECEIVER 119(BY COMPARING DESTINATION PROCESSOR TO ID TABLE) ADDS DESTINATION PROCESSOR, OPERATOR POINTS TO DISPLAYED ICON, ORIGINATING PROCESSOR ADDS WIRELESS DESTINATION. ADDS DESTINATION PROCESSOR, OPERATOR POINTS TO DISPLAYED ICON, ORIGINATING PROCESSOR ADDS WIRELESS DESTINATION. ADDS DESTINATION PROCESSOR ADDS DESTINATION PROCESSOR ADDS INTERFACE (WIRELESS)
DESTINATION AND DESTINATION
PROCESSOR ADDS INTERFACE (WIRELESS) DESTINATION AND ID OF RECEIVER 119 ORIGINATING PROCESSOR -METHOD ENTRY ဖ S က N

APPROVED	O.G. FIG.		
BY	CLASS	SUBCLASS	
DRAFTSMAN			

